

# Annual Report 2001 of the Environmental Finance Center Network

Environmental Finance Center Network

2001 Annual Report

## EFC at the University of North Carolina

### The University of North Carolina is one of two EFC's in Region 4

Thanks to the continuing support from the University of North Carolina and the United States Environmental Protection Agency (EPA), the efc@unc continued in 2001 to pursue its mission:

*providing a bridge between students and faculty in the university who work principally on environmental financing, management and planning tools, and the governments and businesses whose job it is to use those tools for the public interest.*

Towards these ends, the efc@unc took on and completed several significant projects in 2001 and set its agenda for further work in 2002. In addition to the project work completed this year, the efc@unc made progress in strengthening its own institutional capacity by hiring an associate director and entering into new partnerships with a wide range of organizations. These actions have allowed the efc@unc to leverage funds and increase the impact and scope of its work.

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At the start of 2001, the efc@unc published its major report on the costs and financing of North Carolina's Million Acres land conservation initiative.

During 2001, the efc@unc worked closely with several other EFCs on a national source water protection pilot project.

In addition, the efc@unc planned and hosted the 2001 annual meeting of EFCs. Deputy Regional Administrator and Environmental Finance Advisory Board chairman Stan Meiburg graciously shared his thoughts on the work and potential of the centers, and extended his stay to hear reports in detail about projects underway around the country. Other EPA officials, from both headquarters as well as Research Triangle Park, joined the centers for the meeting.

At the conference, the efc@unc also delivered its comprehensive environmental finance course to all the centers present.

At the end of 2001, the efc@unc was awarded a grant to develop innovative distance education modules on environmental finance topics for engineering masters students and local government



environmental professionals that to date have had little opportunity for practical environmental finance training. The efc@unc sees this distance education grant as the start of long-term efforts that have always been central to its strategic plan: to use information technology as a bridge between environmental finance expertise and the government officials, and their consultants and contractors, who most directly need that expertise.

#### **ACCOMPLISHMENTS: PROJECTS/INITIATIVES/PROPOSALS**

##### **Environmental finance course**

U.S. EPA commissioned the efc@unc to develop a course for professionals involved in the planning, delivery, regulation, or financing of environmental infrastructure services. The efc@unc first tested and completed the course in 2001. The course material and suggested teaching methodology were presented to the other Environmental Finance Centers during the annual EFC meeting. Paper copies and electronic file versions of all course material, including the instructor's manual, were distributed to the other Environmental Finance Centers to be adapted and delivered as needed. Further refinement of the course content continues at Chapel Hill in the Spring of 2002.

The course consists of 5 distinct modules including:

- Module 1: Essentials of Capital and Financial Planning
- Module 2: Capital Financing for Environmental Projects
- Module 3: Paying for Environmental Infrastructure
- Module 4: Privatization of Environmental Services

- Module 5: Managing Demand for Environmental Services

The modules can be taught together, or separately, and can be taught in longer or shorter versions. The primary audience is persons who have prior training and experience in planning, public administration, engineering, or related disciplines and who have a practical need to understand environmental finance.

##### **Database of southeast environmental financing sources**

In 2001, the efc@unc completed compiling of a database of low-cost loan and grant financing sources for environmental projects in the southeast. The information for the database was gathered for the efc@unc by several sister universities throughout the region. Basic information from the database is now available on the efc@unc's web site. The efc@unc is developing a more interactive web database system that will allow individuals and organizations to identify funding sources based on type and size of project and other specific criteria.

##### **Environmental finance and policy technical assistance**

The efc@unc team expanded the training, technical assistance and policy analysis services it provides to public utilities and local and state governments this year. The efc@unc developed and delivered a presentation on environmental policy and finance topics to approximately 500 newly elected mayors and city council members as part of the UNC Institute of Government's Newly Elected Municipal Official Training program. The efc@unc also worked with the North Carolina Section of the American Water

Works Association to introduce more environmental finance training programs into their established training programs. In the past, the organization has focused much more on technical engineering topics than finance, management, or policy topics. Two new training programs are now scheduled for 2002 including one on GASB 34 and asset management and one on the use of enterprise budgets within utilities.

In addition, the efc@unc provided information and policy guidance to specific local and state government organizations on a range of topics including creation and financing of storm water utilities; management of on-site wastewater systems; local government power to regulate wetlands and animal waste operations; use of fiscal analysis to evaluate land use decisions, particularly open space preservation versus development; analyzing cumulative and secondary impacts of environmental permit decisions; and the costs and benefits of creating environmental management systems.

#### **Assisting environmental non-profits to develop business plans**

In 2001, the efc@unc began a pilot project designed to incorporate business planning and other financial planning techniques into the operations of a nationally recognized non-profit 501 (c) organization, the Scrap Exchange (TSE). TSE collects industrial and commercial waste by-products and converts them into art supplies and materials which it in turn uses to deliver creativity and environmental education outreach activities throughout the southeast. In 2001, TSE carried out events that reached over 10,000 participants. TSE success depends on partnering with a variety of organizations including local governments, schools, and private corporations. In the past, TSE, like many not-for-profit environmental organizations, has devoted little time to financial planning and service

pricing issues and as a result has been in a state of constant financial difficulty and at risk of ceasing their operations. The goal of the project is to develop a replicable business model and to demonstrate the importance of sound financial planning in assuring the ability of non-profits to provide sustainable environmental programs.

#### **Environmental finance distance education**

The efc@unc submitted and won a grant at the end of 2001 to develop distance education modules in several areas of environmental finance for different target audiences. The efc@unc entered into a partnership with several training and professional organizations including North Carolina State University, American Water Works Association, and the North Carolina Water Treatment Plant Operator's Certification Board. EFC@unc met with representatives from these organizations to identify priority environmental finance training needs and potential distance education techniques for delivering the training. In 2002, the efc@unc will complete and pilot test, and evaluate at least 3 separate training modules that will eventually be used to provide increased environmental finance training opportunities to thousands of environmental professionals across the southeast.

#### **FERC relicensing and local land use planning**

The Federal Energy Regulatory Commission is in the middle of a large wave of relicensing decisions for hydro plants throughout the nation, and many of these are located in the southeast. In 2001, the efc@unc collected policy outcomes in past FERC license cases that might help state and local governments that are interested in environmental issues in the vicinity of

hydro projects. For example, in a FERC case on the Pigeon River in western North Carolina, the resolution in 1994 of a long-standing dispute led to the creation of a fund that gives grants for local water quality projects. The efc@unc has cataloged similar efforts around the country so that stakeholders in the upcoming license renewals will have some sense for outcomes that are possible. The full report is available now at [www.efc.unc.edu](http://www.efc.unc.edu).

### Source Water Protection

The efc@unc continued to work with several other Environmental Finance Centers on the national source water protection planning effort led by the EFC at the University of New Mexico. Our center focused on several small municipalities that share a surface water supply in the Broad River basin of southwest North Carolina, just upstream from South Carolina. This area is one of the most economically depressed areas of the state, due to its historical concentration of jobs in the textile industry. Now that most of the mills are closed, jobs have become a major priority. At the same time, there is widespread recognition of the need to preserve the environmental assets the area has, one of which is water.

The efc@unc has helped create a local project steering committee comprised of leaders in three municipalities and the county, all of whom share dependence on the Broad River system for their drinking water. The group has established itself as the Rutherford County Drinking Water Protection Committee. The efc@unc has facilitated a series of monthly meetings of the group to help identify priority threats to the water supply and potential interventions. The Committee is becoming very productive and producing results that will be interesting for EPA's Office of Groundwater and Drinking Water, as well as state water supply regulators, as a pilot study in the

extent to which local governments can learn to work together on shared resource issues.

### Million acres initiative

In January 2002, the efc@unc released its report on the costs and financing options for North Carolina's initiative to protect one million acres of additional open space over a decade. The report, nearly a year in the making, was the first attempt in North Carolina to catalog and financially assess the past open space preservation efforts in the state, as well as to put a price tag on the legislation to protect additional acreage. The full report is available at [www.efc.unc.edu](http://www.efc.unc.edu). It was very well received and led to a vigorous debate; among other things, a bill was introduced in the legislature to amend the state constitution to assure open space funding. In the end, full funding was not appropriated in 2001, due to the severe budget problems the state faced, but the report played a role in assuring continued funding for three of the state's most important existing programs for land conservation: the Clean Water Management Trust Fund, the Farmland Preservation Fund, and the Conservation Tax Credits program. Officials with each of those programs have asked the efc@unc to continue working with them on future funding options.

### Consortium on growth in the Southeast and the SCUPSO (Southeast Consortium of University-based Public Service Organizations) smart growth toolkit

The efc@unc assisted in production of a series of "toolkits" that encapsulate smart growth tools as they

might be applied by local governments in the southeast. Along with researchers at the University of South Carolina and Clemson University, the [efc@unc](mailto:efc@unc) work has been compiled by the Southern Growth Policies Board for distribution around the region. Booklets and an associated CD-ROM with the full toolkit content were released in January 2002. The toolkits will be the basis for training sessions for local officials, and potentially for state and federal regulators, who are interested in what is possible and what is difficult about growth management tools. The [efc@unc](mailto:efc@unc) has had some initial discussion with federal regulatory agencies (the Office of Air Quality Planning and Standards) about making this material available to their staff.

## NEW INITIATIVES FOR 2002

### Development and evaluation of distance education modules

The [efc@unc](mailto:efc@unc) will finish developing distance education training modules focusing on environmental finance topics. These modules will be pilot tested with environmental professionals and a detailed evaluation will be conducted to determine the future role for different distance education techniques to strengthen the finance skills and capability of environmental professionals. Technologies that will be tested include web-based courses, synchronous video based education, and asynchronous multi-media.

### Environmental database management

The [efc@unc](mailto:efc@unc) will continue to develop innovative techniques that improve the access of environmental finance data and information to professionals. The

database of funding sources will be converted to an active web page with advanced query options. The [efc@unc](mailto:efc@unc) is working with several organizations that currently collect and manage data to improve access to their data. Information includes solid waste and water utility benchmarking information; local government environmental programs budget data, and water utility rate information.

### Special environmental finance utility training programs

In 2002, the [efc@unc](mailto:efc@unc) will co-sponsor at least two different new finance trainings for utility managers. The first training will focus on the impacts of GASB 34 policy statement on utility asset management and reporting. The second training will present innovative techniques of using municipal enterprises and enterprise budgets to organize and provide environmental services.

### Collecting and using natural resource economic data

The [efc@unc](mailto:efc@unc) has begun discussions with environmental groups and natural resource economists who are interested in compiling past studies of environmental amenity valuation in the southeast and making this information available, in understandable form, to environmental policymakers in the region.

### Public water supply small systems operator training reimbursement

The [efc@unc](mailto:efc@unc) will assist the North Carolina Department of Environment and Natural Resources

with development of their reimbursement program for water system operators' training, as well as searching for ways to improve training delivery.

## **EFC NETWORK COLLABORATIONS**

### **Annual meeting**

The efc@unc organized and held the annual EFC director's meeting in Chapel Hill, the network's premiere annual event for collaborative planning.

### **Financing course**

The efc@unc completed the preparation of a environmental finance training course this year. The course material in paper and electronic form were presented and distributed to the other EFCs and are now available as a curriculum for national training on environmental finance.

### **Source water protection planning**

The source water protection project is a network project. Each participating center is taking a somewhat different approach (organized around a common procedural core) so that, in the end, U.S. EPA will have a rich set of examples to draw on for lessons about source water protection planning in multi-jurisdictional settings. As a complement to this project, the efc@unc hosted a source water protection training attended by several other Efc's, as well as staff from the North Carolina Department of Environment and Natural Resources, using materials from the Drinking Water Academy.

### **Public Management Finance Institute**

The efc@unc attended, observed and assisted with the Public Finance Management Finance Institute conducted by the Maxwell School at Syracuse in 2001.

## **PRESENTATIONS, CONFERENCES AND MEETINGS**

- Institute of Government School for Municipal and County Administration, Presentations on local environmental roles and responsibilities, March and October 2001.
- Institute of Government School for New City Attorneys, Presentation on environmental law and finance, March 2001
- Institute of Government School for Newly Elected Mayors and Council Members, Presentation on Environmental Finance and Management at the local level, various locations in North Carolina, 2001
- American Bar Association, Presentation on Financing Open Space, Atlanta, May 2001
- Annual Meeting of the Environmental Finance Centers, October 2001
- UNC School of Public Health, Presentation on environmental finance and policy, October 2001
- Annual Meeting of North Carolina American Water Works Association
- Nicholas School of Government, Duke University, Presentation on the law and finance of contaminated property cleanup, November 2001

- Meetings with staff of the City of Raleigh regarding creation of a storm water utility, December 2001

## **ABOUT THE efc@unc AND THE ENVIRONMENTAL FINANCE CENTER NETWORK**

The Environmental Finance Center at UNC-Chapel Hill (efc@unc) is one of a group of university-based centers that concentrate on problems in the financing of environmental services. The U.S. Environmental Protection Agency originally established the centers in order to bring the work of researchers in the universities directly to bear on local environmental problems. For more information on the Environmental Finance Center network, see [www.epa.gov/efin](http://www.epa.gov/efin).

The efc@unc was begun in 1998 as a joint venture between the Institute of Government and the Office of Economic Development, both at UNC-Chapel Hill. Faculty and students working with the efc@unc concentrate on helping improve the financing and delivery of environmental goods and services by local governments. For more information, see [www.efc.unc.edu](http://www.efc.unc.edu). Or call Richard Whisnant, Director of the center, at (919) 962-9320, or Jeff Hughes, Associate Director, at (919) 733-4956.